

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA  
No. 1:16-cv-607

ROANOKE RIVER BASIN	)	
ASSOCIATION,	)	
	)	
Plaintiff,	)	
	)	
v.	)	
	)	
DUKE ENERGY PROGRESS, LLC	)	<b>COMPLAINT</b>
	)	(JURY TRIAL DEMANDED)
Defendant.	)	
_____	)	

**NATURE OF THE CASE**

1. This citizen enforcement action challenges ongoing, unlawful discharges of toxic metals and other pollutants by Defendant Duke Energy Progress, LLC (“Duke Energy”) and other violations of law at its Mayo Steam Station coal-fired electricity generating plant (“Mayo”) in Roxboro, Person County, North Carolina, in violation of the Clean Water Act (“CWA”), 33 U.S.C. §§ 1251-1376.

2. At Mayo, Duke Energy is polluting Mayo Lake, an important fishing lake and popular recreational destination for the region; Crutchfield Branch, a tributary of the Dan River and the Roanoke River Basin that flows from North Carolina into Virginia; wetlands adjacent to these waters; and groundwater.

3. Duke Energy owns and operates Mayo. It stores approximately 6.9 million tons of coal ash in a leaking, unlined pit on the banks of Mayo Lake; on top of and in Crutchfield Branch; and in the groundwater. *See Site Map* attached as Exhibit 1.

4. In the nearly forty years Duke Energy has stored coal ash at Mayo, it has never obtained a permit for discharges into Crutchfield Branch, for discharges into Mayo Lake by way of hydrologically-connected groundwater, or for disposing of pollutants in the state's groundwater.

5. Duke Energy's coal ash pond has polluted the surrounding groundwater, Crutchfield Branch, Mayo Lake, and adjacent wetlands with heavy metals including arsenic, boron, chromium, iron, manganese, thallium, and vanadium.

6. As long as coal ash and other wastes remain in this leaking, unlined pit, it will continue to discharge pollutants into the groundwater and surface waters in violation of the Clean Water Act. These discharges will continue to place Crutchfield Branch, Mayo Lake, adjacent wetlands, groundwater, and people who use the Branch, the Lake, adjacent wetlands, and the groundwater at risk of groundwater contamination, surface water contamination, and potential catastrophic failure of the coal ash impoundment.

#### **JURISDICTION, VENUE, AND NOTICE**

7. Roanoke River Basin Association ("the Association") brings this enforcement action under the citizens' suit provision of the CWA. 33 U.S.C. § 1365. This court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 and has jurisdiction over the parties.

8. Venue is proper in this court pursuant to 28 U.S.C. § 1391(b) and 33 U.S.C. § 1365(c)(1). The challenged discharges and fill are located and are occurring in Person County.

9. In compliance with 33 U.S.C. § 1365(b)(1)(A), and 40 C.F.R. § 135.2, on April 11, 2016, the Association gave Duke Energy, the Administrator of the United States Environmental Protection Agency (“EPA”), and the North Carolina Department of Environmental Quality (“DEQ”) notice of the violations specified in this complaint and of the Association’s intent to file suit after sixty days should those violations continue. A copy of the notice letter with documentation of its receipt is attached as Exhibit 2.

10. More than sixty days have passed since the notice was given pursuant to law and regulation, and the violations identified in the notice letter are continuing at this time and reasonably likely to continue in the future.

11. EPA and DEQ have not commenced and are not diligently prosecuting a civil or criminal action to redress the violations asserted in this citizen enforcement action.

12. In August 2013, DEQ filed an enforcement action against Duke Energy Progress for violations of North Carolina’s anti-pollution statutes at a number of its plants, including Mayo. Exhibit 3. However, in this action, the Association seeks to enforce permit requirements and CWA violations that DEQ’s Complaint does not seek to enforce. 33 U.S.C. § 1365(b)(1)(B).

13. In its Complaint, DEQ seeks to enforce certain state groundwater statutes and regulations and seeks to enforce the prohibition against unpermitted discharges in the form of the engineered seeps flowing from the Mayo coal ash pits. In contrast, a number of the claims included in the Association’s enforcement action are based on separate and

distinct violations of the National Pollutant Discharge Elimination System (“NPDES”) permit at Mayo and the Clean Water Act.

14. The North Carolina groundwater statutes and regulations alleged in DEQ’s Complaint govern generally the contamination of groundwater in North Carolina. The Removed Substances provision of the Permit, on the other hand, is a standard, limitation, condition, and requirement of operating a wastewater treatment facility, such as the Mayo coal ash pit, which Duke Energy is allowed to operate in accordance with the terms of the NPDES permit. DEQ’s Complaint does not seek to enforce the Removed Substances provision. The Permit’s Removed Substances provision requires that the operator of a wastewater treatment facility ensure that the substances it removes during the treatment process (in this instance, settling) do not enter the waters of North Carolina or the navigable waters of the United States. Otherwise, the wastewater *treatment* facility is not a wastewater treatment facility at all, but instead is a wastewater *transmission* facility and a wastewater *pollution* facility, because it simply moves the removed substances from the wastewater into the waters of North Carolina or navigable waters of the United States and thereby pollutes those waters. That is exactly what Duke Energy has done and is doing at its Mayo coal ash pit.

15. Further, in the state court action, DEQ does not allege that Duke Energy’s transmission of pollutants from the Mayo ash pit to Crutchfield Branch, Mayo Lake, and adjacent wetlands by way of hydrologically connected groundwater is an unpermitted discharge in violation of Duke Energy’s NPDES permit. That is an additional standard and limitation with which the Association seeks to require compliance in this action.

16. Nor does DEQ's Complaint include a claim for illegal discharges of pollutants into waters of the United States from non-engineered seeps and unpermitted outfalls, which are included in the Association's citizen enforcement action.

17. DEQ's complaint does not include violations of water quality standards in Crutchfield Branch due to indirect discharges. Compliance with water quality standards is a separate violation of Part 1, Section A(8) of the Permit.

18. DEQ also does not seek to enforce Duke Energy's failure to properly operate and maintain its facilities, as the Mayo Permit requires.

19. Additionally, DEQ did not take enforcement action against any of Duke Energy's violations of federal law at Mayo.

20. DEQ has not diligently prosecuted its state court action as to any site and specifically not as to Mayo.

21. DEQ has not noticed a single deposition and not one as to Mayo. It sought to stay its own enforcement action, but the Superior Court refused. It entered into an agreement with Duke Energy to conduct no discovery for an extended period of time. It has not filed any motions to ask the Superior Court to require Duke Energy to take any action as to any site or as to the Mayo site in particular.

22. This Court has concluded that DEQ has not diligently prosecuted its enforcement actions. In rejecting the motion of Duke Energy Carolinas, LLC, to dismiss a federal CWA suit over coal ash pollution at the Buck facility in Salisbury, North Carolina, the Court found that in the year after DEQ filed the enforcement action, it "appears to have done little, if anything, to move the case forward" and that "there

appeared little likelihood that [DEQ's] action would proceed expeditiously to a final resolution.” Order Denying Motion to Dismiss, *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, No. 1:14-CV-753, --- F.Supp.3d. ---, 2015 WL 6157706, at \*7 (M.D.N.C. Oct. 20, 2015). The Court ruled that it “is unable to find that [DEQ] was trying diligently or that its state enforcement action was calculated, in good faith, to require compliance with the Act.” *Id.*

23. DEQ has taken no steps to diligently prosecute its state court action in the more than six months since this Court's ruling. Therefore, in addition to the federal claims that DEQ has not brought at all in the state action, the Association is also bringing in this Action claims to enforce the Clean Water Act prohibitions against the unpermitted and expressly forbidden engineered discharges (or toe drains) into Crutchfield Branch, which DEQ included in the state action but has not prosecuted, diligently or otherwise.

24. North Carolina enacted a Coal Ash Management Act in 2014. Under that Act, the public had a chance to appear at a hearing and submit comments concerning the future of all of Duke Energy's coal ash sites in North Carolina, including Mayo. At the hearing and in public comments, the public overwhelmingly urged DEQ to classify Mayo under the Coal Ash Management Act so that Duke Energy would be required to remove the coal ash and other materials from the unlined pit.

25. North Carolina's Coal Ash Management Act does not pre-empt or otherwise affect the requirements of the Clean Water Act. But it provides another legal means by which Duke Energy could be required to remove the coal ash and other materials from its unlined, leaking, polluting Mayo coal ash pit.

26. As required by the Coal Ash Management Act, in response to the public comments and based on the science and facts as of May 18, 2016, DEQ gave the Mayo site an “intermediate” rating, which requires the removal of the coal ash and other materials from the unlined Mayo pit. However, Duke Energy immediately began an intensive lobbying of the legislature, which passed new legislation to undo the requirements of the Coal Ash Management Act and suspend the “intermediate” ranking of Mayo and other sites while Duke Energy tries to convince DEQ to change the rating. The General Assembly and the Governor are currently negotiating the exact terms of such legislation, but both branches, in response to Duke Energy’s lobbying, have indicated they do not want DEQ’s May 18 rankings, including the “intermediate” excavation requirement at Mayo, to remain in place.

## **PARTIES AND STANDING**

### **The Association and Its Members**

27. The Roanoke River Basin Association is a § 501(c)(3) non-profit public interest organization with members in North Carolina and Virginia operating in the Roanoke River Basin watershed. Its mission is to establish and carry out a strategy for the development, use, preservation, and enhancement of the resources of the Roanoke River basin in the best interest of present and future generations. The Association’s membership includes local governments, non-profit, civic and community organizations, regional government entities, businesses and individuals.

28. The Association and its members have been harmed by Duke Energy’s unpermitted discharges and unlawful activities. They recreate, fish, and own property in

the Roanoke River Basin, including in the vicinity of and downstream from Mayo, including Crutchfield Branch and Mayo Lake and the waterways into which Duke Energy discharges and into which its waters flow.

29. The Association and its members fear contamination of drinking water, wildlife, and river water, and damage to the value, use, and enjoyment of their property, by discharges from Duke Energy's coal ash lagoon.

30. Duke Energy's discharges of pollutants and contaminants from the Mayo ash lagoon are reducing the use and enjoyment by the Association and its members of the Roanoke River Basin, Mayo Lake, Crutchfield Branch, the waterways into which Duke Energy's waters flow, and their property. Affidavits showing standing are attached as Exhibit 4.

31. These injuries will not be redressed except by an order from this court assessing civil penalties against Duke Energy and requiring Duke Energy to take immediate and substantial action to stop the flow of contaminated water and pollutants into Crutchfield Branch and Mayo Lake, to empty the impoundments of all coal combustion byproducts, to move its storage of coal ash away from Crutchfield Branch and Mayo Lake, to remediate groundwater contamination at Mayo, and to comply with other relief sought in this action.

### **Defendant**

32. Duke Energy Progress, LLC, formerly known as Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc., is a North Carolina limited liability corporation with its headquarters in Raleigh, North Carolina. It is engaged in the

generation, transmission, distribution, and sale of electricity. Duke Energy owns and operates the Mayo Steam Plant, where the violations that gave rise to this action occurred.

33. Duke Energy is a “person” within the meaning of section 502(5) of the Act, 33 U.S.C. § 1362(5).

### **STATUTORY BACKGROUND**

34. The Clean Water Act seeks to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To accomplish that objective, Congress set the national goal that “the discharge of pollutants into the navigable waters be eliminated.” *Id.* Accordingly, the Act, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants from a point source to waters of the United States except in compliance with, among other conditions, a NPDES permit issued pursuant to 33 U.S.C. § 1342. Each violation of a NPDES permit—and each discharge of a pollutant that is not authorized by the permit—is a violation of the Clean Water Act. 33 U.S.C. §§ 1311(a); 1342(a); 1365(f).

35. The Clean Water Act defines a “point source” as “*any* discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, [or] container . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14) (emphasis added). Under this broad definition, the discharge of pollutants from mining pits, slurry ponds, sediment basins, and mining leachate collection systems have been held to be point sources. “The term ‘point source’ has been taken beyond pipes and ditches and now includes less discrete conveyances,

such as cesspools and ponds.” *N. Cal. River Watch v. City of Healdsburg*, No. C01-04686WHA, 2004 WL 201502, at \*11 (N.D. Cal. Jan. 23, 2004) (citing *Cnty. Ass’n for Restoration v. Bosma Dairy*, 305 F.3d 943, 955 (9th Cir. 2002); *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988 (E.D. Wash. 1994)), *aff’d*, 496 F.3d 993 (9th Cir. 2007). *Accord U.S. v. Earth Sciences, Inc.*, 599 F.2d 368, 374 (10th Cir. 1979) (“[W]hether from a fissure in the dirt berm or overflow of a wall, the escape of liquid from the confined system is from a point source.”); *Consolidation Coal Co. v. Costle*, 604 F.2d 239, 249-50 (4th Cir. 1979) (finding that “discharges from coal preparation plant associated areas,” which included slurry ponds, drainage ponds, and coal refuse piles, were within Clean Water Act definition of point source), *rev’d on other grounds*, 449 U.S. 64 (1980).

36. In addition, a “point source need not be the original source of the pollutant; it need only convey the pollutant to ‘navigable waters.’” *S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105 (2004); *accord W. Va. Highlands Conservancy, Inc. v. Huffman*, 625 F.3d 159, 168 (4th Cir. 2010) (permits are required for discharges from point sources that “merely convey pollutants to navigable waters”). Thus, ditches and channels that convey pollutants — but are themselves not the original source — constitute point sources. This includes unintentional conveyance of pollutants, for example, through natural-formed ditches, gullies, or fissures. *See Sierra Club v. Abston Constr. Co.*, 620 F.2d 41, 45 (5th Cir. 1980) (discharge from mining pits and spoil piles through naturally formed ditches caused by gravity flow at a coal mining site are point sources); *Earth Sciences*, 599 F.2d at 368 (unintentional discharges of pollutants

from a mine system designed to catch runoff from gold leaching are point sources); *N.C. Shellfish Growers Ass'n v. Holly Ridge Assocs., LLC*, 278 F. Supp. 2d 654, 679 (E.D.N.C. 2003) (“Notwithstanding that it may result from such natural phenomena as rainfall and gravity, the surface run-off of contaminated waters, once channeled or collected, constitutes discharge by a point source.”); *O’Leary v. Moyer’s Landfill, Inc.*, 523 F. Supp. 642, 655 (E.D. Pa. 1981) (intent of the discharging entity is irrelevant).

37. This Court recently confirmed that “[a]s confined and discrete conveyances, [coal ash] lagoons fall within the CWA’s definition of ‘point source.’” *Yadkin Riverkeeper*, 2015 WL 6157706, at \*8.

### **FACTS**

38. In 1978, Duke Energy built a 110-foot dam over Crutchfield Branch to impound water and create a pit for storing coal ash and other wastes from the Mayo Plant.

39. Crutchfield Branch is a navigable water and a water of the United States and of North Carolina. It flows through the ash pond dam into the Roanoke River Basin, through the states of Virginia and North Carolina.

40. The damming of Crutchfield Branch created a 144-acre lagoon, filling the pit with water. Rain water flows into the pit from above, and groundwater flows into the pit from the sides and below.

41. For nearly forty years, Duke Energy has discharged coal ash into the pit, along with other wastewater streams and waste from burning coal, including coal pile runoff, stormwater runoff, cooling tower blowdown, reverse osmosis wastewater, plant

area wash down wastewater, equipment heat exchanger water, and treated domestic wastewater or sewage.

42. Duke Energy has placed millions of tons and approximately 80 vertical feet of coal ash, sludge, and pollutants into the groundwater at the Mayo coal ash lagoon. USGS topography of the site before the basin was constructed shows the elevation at the bottom of the Crutchfield Branch stream valley at 400 feet above sea level, and Duke Energy's own reports show that the groundwater elevation in the basin is at least 480 feet above sea level. Thus, the coal ash is submerged approximately 80 feet deep in groundwater at Mayo.

43. Duke Energy has placed millions of tons of coal ash and other pollutants, solids, and sludge into the lagoon behind the dam and into and over the portion of Crutchfield Branch behind the dam. As a result, the portion of Crutchfield Branch that flows behind the dam and that is encompassed by the coal ash lagoon is filled with and buried under millions of tons and tens of feet of coal ash, sludge, and pollutants.

44. Duke Energy operates the coal ash lagoon under a NPDES permit, #NC0038377, issued by DEQ. Exhibit 5. Duke Energy committed to treat the wastewater through a settling process, in which sediments, solids, and other pollutants settle to the bottom of the pit. Then, supposedly treated wastewater at the top of the lagoon is discharged through a riser system.

45. The NDPEs Permit allows Duke Energy to discharge treated wastewater from the coal ash pit only from a designated outfall, a canal flowing into Mayo Lake. No other discharge into waters of the State or of the United States is permitted, including

groundwater, rivers, streams, or lakes. Indeed, the Permit expressly prohibits Duke Energy from directly discharging from the coal ash lagoon into Crutchfield Branch.

46. The coal ash pit has contaminated groundwater with various coal ash pollutants, including antimony, arsenic, barium, boron, chromium, cobalt, iron, manganese, pH, thallium, total dissolved solids (TDS), and vanadium.

47. This contaminated groundwater flows into Crutchfield Branch and Mayo Lake. In addition, contaminated wastewater flows out of the dam and coal ash pit directly into Crutchfield Branch through seeps and engineered drains.

48. In Crutchfield Branch, numerous pollutants have exceeded water quality standards, including aluminum, boron, copper, iron, manganese, thallium, vanadium, and zinc.

49. Arsenic is a known carcinogen that causes multiple forms of cancer in humans. It is also a toxic pollutant, 40 C.F.R. § 401.15, and a priority pollutant, 40 C.F.R. Part 423 App'x A. Arsenic is also associated with non-cancer health effects of the skin and the nervous system.

50. Antimony is listed as a toxic pollutant, 40 C.F.R. § 401.15, and is associated with reduced lifespan, decreased blood glucose, and altered cholesterol in rodents, and with vomiting and cardiac and respiratory effects in humans.

51. According to the U.S. Agency for Toxic Substances and Disease Registry (ATSDR), vanadium can cause nausea, diarrhea, and stomach cramps. And the International Agency for Research on Cancer (IARC) has determined that vanadium is possibly carcinogenic to humans.

52. Barium can cause gastrointestinal disturbances and muscular weakness. Ingesting large amounts, dissolved in water, can change heart rhythm and can cause paralysis and possibly death. Barium can also cause increased blood pressure.

53. Oral exposure to boron has led to developmental and reproductive toxicity in multiple species. Specific effects include testicular degeneration, reduced sperm count, reduced birth weight, and birth defects.

54. Chromium is a toxic pollutant, 40 C.F.R. § 401.15, and oral exposure to hexavalent chromium, a human carcinogen, has been found to cause cancers of the stomach and mouth. Exposure to the skin may cause dermatitis, sensitivity, and ulceration of the skin.

55. IARC has determined that cobalt is possibly carcinogenic to humans. Short-term exposure of rats to high levels of cobalt in the food or drinking water resulted in effects on the blood, liver, kidneys, and heart. Longer-term exposure of rats, mice, and guinea pigs to lower levels of cobalt in the food or drinking water results in effects on the same tissues (heart, liver, kidneys, and blood) as well as the testes, and also caused effects on behavior. Sores were seen on the skin of guinea pigs following skin contact with cobalt for 18 days.

56. Copper is a toxic pollutant, 40 C.F.R. § 401.15, and according to EPA, people who consume drinking water with high levels of copper can experience gastrointestinal distress, and with long-term exposure may experience liver or kidney damage.

57. According to the ATSDR, some studies show that people exposed to high levels of aluminum may develop Alzheimer's disease. People with kidney disease have trouble removing aluminum from their system.

58. Iron can render water unusable by imparting a rusty color and a metallic taste and causing sedimentation and staining; to prevent these effects the EPA has set a secondary drinking water standard of 300 ug/L.

59. Manganese is known to be toxic to the nervous system. Manganese concentrations greater than 50 ug/L render water unusable by discoloring the water, giving it a metallic taste, and causing black staining. Exposure to high levels can affect the nervous system; very high levels may impair brain development in children.

60. Thallium is a toxic pollutant, 40 C.F.R. § 401.15, and exposure to high levels of thallium can result in harmful health effects. Studies in rats have shown adverse developmental effects from exposure to high levels of thallium, and some adverse effects on the reproductive system after ingesting thallium for several weeks.

61. Zinc is a toxic pollutant, 40 C.F.R. § 401.15, and according to ATSDR, ingesting high levels of zinc may cause stomach cramps, nausea, and vomiting. Ingesting high levels of zinc for several months may cause anemia, damage the pancreas, and decrease levels of high-density lipoprotein (HDL) cholesterol.

62. High concentrations of total dissolved solids can make drinking water unpalatable and can cause scale buildup in pipes, valves, and filters, reducing performance and adding to system maintenance costs.

63. Concurrent exposure to multiple contaminants may intensify existing effects of individual contaminants, or may give rise to interactions and synergies that create new effects. Where several coal ash contaminants share a common mechanism of toxicity or affect the same body organ or system, exposure to several contaminants concurrently produces a greater chance of increased risk to health.

64. All these pollutants can make water unusable or undesirable for agricultural uses.

65. Duke Energy has constructed a modern, lined landfill for the dry storage of coal ash on property it owns very near to the Mayo plant. This facility has, and its planned expansions are designed to have, more than enough capacity to contain the coal ash and other materials contained in the Mayo coal ash pit. Yet, to date, Duke Energy has refused to move the coal ash and other pollutants from its leaking, unlined, polluting Mayo coal ash pit to this lined landfill nearby.

### **CLAIMS FOR RELIEF**

66. The allegations of the preceding paragraphs are incorporated by reference as if repeated and set forth herein.

#### **I. Duke Energy Is Discharging from Unauthorized Point Source Discharges to Waters of the United States.**

67. As explained above, any point source discharge that is not authorized by a NPDES permit is a violation of the Clean Water Act. 33 U.S.C. § 1311(a).

68. Duke Energy is violating the Clean Water Act by discharging multiple unpermitted wastewater flows from the Mayo pit into waters of the United States.

69. Duke Energy has constructed unpermitted channels to facilitate the illegal flow of waters from the coal ash pit into waters of the United States.

70. Seeps and engineered toe drains running from the dam to Crutchfield Branch discharge into waters of the United States without a permit.

71. The Mayo coal ash pit, its dam, its leaks, flows, streams, seeps, and engineered ditches are all point sources under the Clean Water Act, and they are discharging without a permit to waters of the United States in violation of the Act.

**II. Duke Energy is Causing Removed Substances to Enter State Waters and Navigable Waters of the United States, Violating a Permit Prohibition.**

72. Duke Energy has violated the CWA at Mayo by violating an express condition in its NPDES permit barring the pollutants from the coal ash lagoons entering North Carolina waters and navigable waters.

73. Duke Energy's Mayo NPDES permit, Part II.B.1, states that "[t]he Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA . . . and is grounds for enforcement action."

74. Part II.C.6 (the "Removed Substances" provision) of the Mayo Permit requires that: "Solids, sludges . . . or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of . . . in a manner such as to *prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States*" (emphasis added).

75. The ash lagoon receives and treats various waste streams, including coal ash and other substances from the burning of coal, coal pile runoff, stormwater runoff,

cooling tower blowdown, reverse osmosis wastewater, plant area wash down wastewater, equipment heat exchanger water, and treated domestic wastewater or sewage. These waste streams are treated by sedimentation in the ash lagoons. Pollutants that have been removed in the course of treatment are stored in the Mayo coal ash lagoon.

76. The Removed Substances provision prohibits Duke Energy from allowing coal ash contaminants removed in the course of treatment (i.e., settling) as well as coal ash and other wastes — and pollutants, solids, sediments, and sludge from them — to enter the waters of North Carolina and navigable waters of the United States.

Groundwater is included in the North Carolina pollution control statute's definition of waters of the State. N.C. Gen. Stat. § 143-212(6). So are Crutchfield Branch and adjacent wetlands, which are also navigable waters of the United States.

77. Pollutants, solids, and sludges from Duke Energy's Mayo coal ash lagoon have for years been entering State waters and navigable waters. For years, pollutants from coal ash have been found in groundwater under, at, and around the Mayo site. In addition, for years, coal ash, sediments, sludges, and pollutants have been disposed of in the groundwater at Mayo.

78. Monitoring well data from the site show the unlined ash lagoon has caused at least antimony, arsenic, barium, boron, chromium, cobalt, iron, manganese, pH, thallium, TDS, and vanadium to enter the groundwater.

79. Monitoring has also shown that numerous pollutants have entered Crutchfield Branch from the coal ash lagoon, including at least aluminum, boron, copper, iron, manganese, thallium, vanadium, and zinc.

80. The coal ash settling lagoon is a wastewater treatment system; its purpose is to treat and remove solids, sludges, and pollutants. Instead, in violation of an express provision of its permit, Duke Energy has been and is allowing the unpermitted and uncontrolled entrance of solids, sludges, and pollutants into the waters of the State and navigable waters of the United States.

81. Accordingly, Duke Energy's unauthorized discharges of solids, sludges, and pollutants to State waters — including the groundwater of North Carolina, Mayo Lake, Crutchfield Branch, and adjacent wetlands — constitute violations of its NPDES permit and thus of the Clean Water Act.

82. This prohibition of discharges of pollutants to navigable waters and State waters, including groundwaters of the State, is enforceable through a citizen suit under the Clean Water Act, as are the other permit conditions and prohibitions Duke Energy has violated. *See* 33 U.S.C. § 1370 (allowing states to adopt and enforce more stringent limitations in CWA permits than the federal government); 33 U.S.C. § 1311(b)(1)(B) (stating that more stringent state limitations in furtherance of the objective of the CWA include “those necessary to meet water quality standards”); *Sierra Club v. Va. Elec. & Power Co.*, No. 2:15CV112, 2015 WL 6830301, at \*6-7 (E.D. Va. Nov. 6, 2015) (allowing citizen suit claims for violation of Removed Substances permit provision for surface and groundwater discharges); *Yadkin Riverkeeper*, 2015 WL 6157706, at \*12 (allowing citizen suit claims for violation of Removed Substances permit provision for surface and groundwater discharges); *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, 25 F. Supp. 3d 798, 810-11 (E.D.N.C. 2014) *amended*, No. 7:13-CV-200-

FL, 2014 WL 10991530 (E.D.N.C. Aug. 1, 2014) (allowing citizen suit claims for violation of Removed Substances permit provision for surface and groundwater discharges). *See also Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 152 (4th Cir. 2000) (confirming citizens are “authorized to bring suit against any NPDES permit holder who has allegedly violated its permit.”); *Nw. Env'tl. Advocates v. City of Portland*, 56 F.3d 979, 986 (9th Cir. 1995) (“The plain language of CWA § 505 authorizes citizens to enforce all permit conditions”); *Culbertson v. Coats Am.*, 913 F. Supp. 1572, 1581 (N.D. Ga. 1995) (holding that “[t]he CWA authorizes citizen suits for the enforcement of all conditions of NPDES permits”).

### **III. Duke Energy Is Illegally Discharging Directly to Crutchfield Branch.**

83. Part 1, Section A (8) of the Mayo NPDES Permit provides: “There shall be no direct discharge of wastewater from the ash pond to Crutchfield Branch.”

84. Duke Energy is discharging directly into Crutchfield Branch from the Mayo coal ash pit, in violation of the Permit’s direct discharge prohibition.

### **IV. Duke Energy’s Indirect Discharges Are Causing Illegal Violations of Water Quality Standards in Crutchfield Branch.**

85. As set out above, in Crutchfield Branch, numerous pollutants have exceeded water quality standards, including aluminum, boron, copper, iron, manganese, thallium, vanadium, and zinc. These violations of water quality standards in Crutchfield Branch are due to indirect discharges from Duke Energy’s coal ash lagoon.

86. In Part 1, Section A (8), the Permit provides: “There shall be no violation of water quality standards in Crutchfield Branch due to any indirect discharges from the ash pond.” Exhibit 2. Duke Energy is thus also violating this provision of the Permit.

**V. Duke Energy Is Unlawfully Discharging Through Close Hydrologic Flow into Waters of the United States.**

87. According to documents prepared by Duke Energy’s own consultant, the contaminated groundwater at Mayo flows directly into Crutchfield Branch and Mayo Lake and adjacent wetlands. These unpermitted discharges of pollutants via hydrologically-connected groundwater to navigable surface waters constitute additional violations of the Clean Water Act.

88. The CWA prohibits “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12)(A). “[T]he touchstone for finding a point source is the ability to identify a discrete facility from which pollutants have escaped.” *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 987 (E.D. Wash. 1994).

89. In a virtually identical case, this Court held that the Clean Water Act applies to Duke Energy’s coal ash pollution of hydrologically-connected groundwater discharges. *Yadkin Riverkeeper*, 2015 WL 6157706, at \*9-10.

90. Moreover, EPA has stated repeatedly that the CWA applies to such hydrologically-connected groundwater discharges. 66 Fed. Reg. 2960, 3015 (Jan. 12, 2001) (“EPA is restating that the Agency interprets the Clean Water Act to apply to discharges of pollutants from a point source via groundwater that has a direct hydrologic connection to surface water.”). *Accord* 56 Fed. Reg. 64876-01, 64892 (Dec. 12, 1991)

(“the Act requires NPDES permits for discharges to groundwater where there is a direct hydrological connection between groundwaters and surface waters.”); 55 Fed. Reg. 47990, 47997 (Nov. 16, 1990) (announcing stormwater runoff rules and explaining that discharges to groundwater are covered by the rule where there is a hydrological connection between the groundwater and a nearby surface water body).

91. Because there is a direct hydrologic connection between the coal ash lagoon and Crutchfield Branch and Mayo Lake and adjacent wetlands, Duke Energy’s discharges from the lagoon via the groundwater to these waters, as well as the lagoon itself, are point sources that violate the Clean Water Act.

**VI. Duke Energy Has Failed to Properly Operate and Maintain the Mayo Facility.**

92. Part 1C, Section C.1 of the NPDES permit provides: “The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this individual permit.” Part II, Section C.2 similarly provides: “The Permittee shall at all times provide the operation and maintenance resources necessary to operate the existing facilities at optimum efficiency. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this individual permit.”

93. As set out above, Duke Energy has repeatedly and in a variety of ways violated the NPDES permit. Its wastewater treatment facility and systems leak,

malfunction, pollute, and otherwise violate the conditions of the permit. All the permit violations set out above are also violations of these basic permit requirements to properly operate and maintain a wastewater facility and systems.

94. All violations of the Clean Water Act alleged above are continuing violations.

### **PRAYER FOR RELIEF**

WHEREFORE, the Association respectfully requests that this court:

A. Issue a declaratory judgment stating that Duke Energy is violating the Clean Water Act with its ongoing unpermitted discharges into Crutchfield Branch, Mayo Lake, adjacent wetlands, and the groundwater at Mayo in violation of Duke Energy's NPDES permit and the Clean Water Act, and by allowing and causing the entering of such removed substances into the groundwater at Mayo and Crutchfield Branch in violation of its Permit and the CWA, and by otherwise violating prohibitions and requirements of its Permit;

B. Enter appropriate preliminary and permanent injunctive relief to ensure that Duke Energy:

- i. Prevents the coal ash impoundments from allowing or causing the entering of removed substances, including solids, sludges, materials, substances, and pollutants, into groundwater, adjacent wetlands, Crutchfield Branch, and Mayo Lake;
- ii. Prevents the flow of contaminated groundwater into Crutchfield Branch, Mayo Lake, and adjacent wetlands;

- iii. Removes all existing coal combustion byproducts from the Mayo coal ash pit within a reasonable amount of time and stores them in an appropriately lined industrial solid waste landfill facility away from Mayo Lake and Crutchfield Branch, and separated from the groundwater, with appropriate monitoring;
- iv. Remediates the groundwater beneath the Mayo site resulting from its unpermitted discharges;
- v. Removes from Crutchfield Branch, Mayo Lake, and adjacent wetlands the pollutants it has illegally allowed to enter and discharged into these water bodies;

C. Assess civil penalties against Duke Energy of up to \$37,500 per violation per day pursuant to 33 U.S.C. §§ 1319(d), 1365(a), and 74 Fed. Reg. 626, 627 (Jan. 7, 2009);

D. Award the Association the costs of this action, including reasonable attorney and expert fees, as authorized by 33 U.S.C. § 1365(d); and

E. Grant the Association such further and additional relief as the Court deems just and proper.

THE ASSOCIATION HEREBY DEMANDS A TRIAL BY JURY.

This the 13th day of June, 2016.

/s/ Frank S. Holleman III

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